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(12) United States Patent

Nicolai et al.

(54) LIGHTING DEVICES

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This patent is subject to a terminal disclaimer.

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See application file for complete search history.

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(57) **ABSTRACT**

A lighting device includes a cover portion configured to have a hinged connection for mounting on a housing. The cover portion includes a light emitting diode (LED) and a mixing chamber having a reflective internal surface for receiving light from the LED. A phosphorescent lens is disposed opposite the LED and is configured to reflect light from the LED back to the mixing chamber and to emanate absorbed light from the lens to a surrounding region outside of the mixing chamber. An LED driver circuit is configured to power the LED, the LED driver circuit being electrically connected to a power source. Other embodiments are also disclosed.

22 Claims, 9 Drawing Sheets



